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DATE MAILED: 07/31/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

52123 7590 07/31/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 EXAMINER
CHERY, MARDOCHEE
ART UNIT PAPER NUMBER

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/578,314 | 05/04/2006 | Tetsuva Tanaka | P29850 | 5584 |

TITLE OF INVENTION: AN N-WAY SET ASSOCIATIVE CACHE MEMORY AND CONTROL METHOD THEREOF

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 10/31/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat | form should be used f correspondence includir ad below or directed off tions. | or tran | smitting the ISSU Patent, advance or in Block 1, by (a | TE FEE and PUBLICA ders and notification of the specifying a new co | ATIO of m | ON FEE (if requi aintenance fees w oondence address; | ired). I /ill be and/or | locks 1 through 5 sh nailed to the current (b) indicating a sepa | ould be completed where correspondence address as ate "FEE ADDRESS" for |
|--|--|---|---|--|--|---|--|---|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | | | |
| 52123 | 7590 07/31 | /2008 | | | mve | | | of Mailing or Transi | |
| GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 | | | | I S a t | her State iddre rans | eby certify that thi | is Feet | Transmittal is being | deposited with the United class mail in an envelope above, or being facsimile te indicated below. |
| | | | | ſ | | | | | (Depositor's name) |
| | | | | [| | | | | (Signature) |
| | | | | [| | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVEN | | TOR ATTO | | RNEY DOCKET NO. | CONFIRMATION NO. | |
| 10/578,314 | 05/04/2006 | | | Tetsuya Tanaka | | P29850 | | P29850 | 5584 |
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| nonprovisional | NO | | \$1440 | \$300 | | \$0 | | \$1740 | 10/31/2008 |
| EXAMINER | | | ART UNIT | CLASS-SUBCLASS | | | | | |
| CHERY, MA | CHERY, MARDOCHEE | | 2188 | 711-128000 | | | | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ess an assignee is ident h in 37 CFR 3.II. Comp | " Indica ed. Use | ation form e of a Customer E PRINTED ON T | | ngle or ag attor be p type e pa an a | ely, firm (having as a gent) and the name news or agents. If sortinted. e) tent. If an assignussignment. | memb es of u no nam ee is id | er a 2 | cument has been filed for |
| Please check the appropri | iate assignee category or | catego | ories (will not be pr | inted on the patent): | | Individual 🚨 Co | rporati | on or other private gro | up entity Government |
| 4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies | | | ed) | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | | |
| | s SMALL ENTITY state | ıs. See | 37 CFR 1.27. | | | | | TTY status. Sec 37 CF | |
| NOTE: The Issue Fee and interest as shown by the r | d Publication Fee (if req ecords of the United Sta | uired) v tes Pat | will not be accepted ent and Trademark | d from anyone other the Office. | an th | e applicant; a regi | stered : | ttorney or agent; or th | e assignee or other party in |
| Authorized Signature | | | | | | Date | | | |
| Typed or printed name | | | | | | Registration N | | | |
| This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450. | FR 1.3 U.S.C. USPT rden, sl D NOT | 11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O | on is required to obtain 1.14. This collection is depending upon the in e Chief Information Of COMPLETED FORMS | or re esti idivi ficer TO | etain a benefit by the mated to take 12 r dual case. Any co r, U.S. Patent and THIS ADDRESS | he publ minutes mment Traden i. SENI | ic which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa D TO: Commissioner f | by the USPTO to process) g gathering, preparing, and the you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450, |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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| 52123 | 7590 07/31/2008 | | EXAMINER | | | |
| GREENBLUM | & BERNSTEIN, P.L. | CHERY, MARDOCHEE | | | | |
| | LARKE PLACE | | ART UNIT | PAPER NUMBER | | |
| RESTON, VA 20 | 191 | | 2188 | | | |
| | | | DATE MAILED: 07/31/200 | 18 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 194 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 194 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | _ |
|-----------------|-----------------|---|
| 10/578,314 | TANAKA, TETSUYA | |
| Examiner | Art Unit | |
| MARDOCHEE CHERY | 2188 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to the reply filed on April 14, 2008,
- 2. The allowed claim(s) is/are 1-23.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 2/14/08
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8.

 Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

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Art Unit: 2188

DETAILED ACTION

Response to Amendment

1. This Office Action is a reply to Applicant's communication filed on April 14, 2008

in response to the Official Action mailed on January 14, 2008.

2. In response to the last Office Action, claims 1-23 have been amended. Claims 1-

23 remain pending.

3. The objection to the title is withdrawn in view of the amendment filed on April 14.

2008.

Response to Arguments

4. Applicant's arguments, see remarks, filed on April 14, 1008, with respect to

claims 1 and 21 have been fully considered and are persuasive. The rejection of claims

1-23 has been withdrawn.

Allowable Subject Matter

Claims 1-23 are allowed.

6. Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance "

Art Unit: 2188

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mardochee Chery whose telephone number is (571) 272-4246. The examiner can normally be reached on 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hyung S Sough/ Supervisory Patent Examiner, Art Unit 2188 07/18/08

July 14, 2008

Application/Control Number: 10/578,314

Art Unit: 2188

Mardochee Chery Examiner AU: 2188

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